## LOLLIME 5，חUPEER 12




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## PRESIDENTIAL RAIDBLIMGS

DISK DRIVE FRENZY！！
As we all know，the last meeting was held one week early and coincided with the orlando Computerfest．I have received many calls asking how the＂Fest＂went．I have also had many calls saying＂I hear that the ＇Fest＂was a bust！＂

I＇d like to set the record straight． The fest was both good and bad． There was a low turn out，probably due to the high travel cost and poor advertising in the months prior to the fest．However，those who did show up made the trip worth the effort．No offense to anyone，but the crowd was a little older and probably had a lot lower house payment than us normal folk．They bought a lot of merchandise．The 150 that came，outspent the 600 that went to Cincinatti two years ago． Everyone had a good time．

## CORFRIGUFOR

| Tam | H Fisher |
| :---: | :---: |
| Uerman Smith | eter wan Dijk |
| Gearge Rey | Phil Russa |
| March R．免 | －Jaan Kealy |
| LeGaran Wash | Hank Dicksan |

The Drives are ordered along with the cases．They should easily be in before the meeting．

## RAM CHIP FRENZY！！

If you have put off adding RAM to any computer，you may well be too late to get a bargain now．The price of RAM has doubled．I smell a corporate conspiracy，but there＇s not much we can do about it．Expect devices with RAM in them to increase in price very soon if they haven＇t already．

## THIS MEETING

George Rey will give a demo and talk on using Easel graphics on the QL． I didn＇t make the last meeting，but don＇t forget about your choices for officers for the upcoming year．

## FWOH IIE EIIICR

Wher you tirst oponed your news－ letter，you ought to have said， ＂Hey，the logo is new！＂It is thanks to Mannie Quintero and a piece of Chuck Flatt＇s F＇aste Art pro－ gram．Up till now this was the only page that I wasn＇t able to desktop publish，now the entire newsletter can be produced electronically．It isn＇t though because the 24 pin printer type is so much more read－ ible than the DTP typefaces．What you should also have noted is the number of contributors is way up． I＇m hoping that this isn＇t just an accident and that I can count on it every month．I＇ve even got articles in the＂can＂for next month！

The number of contributors indicates to me that our group is vibrant and not dying，at least from my news－ letter editor＇s perspective．As you might know，I am custodian of the CATS mailbox and as such I get to read the newsletters from other groups，both large and small．Many newsletters have been reduced to nothing more than reprints of arti－ cles from other groups．We aren＇t at this point yet and with your help it will be a long time from now．

Now that I＇m off my soapbox，I need your help．Nothing bie，mind you， just some advice．I＇ve been consid－ ering whether to start a feature cal－ led＂One Liners＂．Sort of a contest to see who could come up with the best one line program．All submis－ sions would be published and monthly winners selected．Prize？Probably a certificate，etc．At the end of the year a grand prize winner selec－ ted from the monthly wimners．What， do you think or，more importantly， would you support it．with contrib－ utions？

This is really a packed issue． Pieter has a banner program in lieu of his usual plotter input．George Rey＇s excellent article on Easel should be read before you come to the meeting．Mark Fisher explores
the bulletin boards in use by the $U$ of M library system．Want to know where to park the kids this summer？ Check out Barry Washington＇s camp listing．In the Letters section， Joan Kealy issues a challenge and Phil Kusso and March Renick start articles on the Sinclair family hardware mods and the CATS tape library，respecively．These will conclude next month．

## CATS ELECTIONS CONING Who＇s your candidate？

## April meeting HGEDDH

11：00 Hardware Workshop 1：00 to 2：00 Lunch 2：00 to 2：30 General Meeting 2：45 to 3：45 GRAPHICS ON THE QL by George Rey 3：45 to 4：30 Open discussion 4：30 Adjoum

## 

Submissions far the newslet－ ter can be in hard capy，with 딘mㅌ $\exists$ I＇ㄹ inches wide ar，preferablys magnetic me－ dia．For the GL，micradrise cartridge， $51 / 4^{\prime \prime} 05,00$ ar Guad densitiy dishs，ar ヨ 1 ノ己＂ disks．Far the टwil，TSIODO， 마 ᄅПБ日，cassettes anlys with titles an the bax．

Send material to：
Editar，CRTS Пewsletter Gax 457
Fairfas Station，UR 22口39

## Executive Board Sets Meeting Structure

In the interest of bringing some order to our meetings, the Executive Board has decided that we will adhere to the following schedule:

Hardware session $11: 00-1: 00$
Lunch Break 1:000-2:00
General Meeting 2:00-2:30
Break 2:30-2:45
Main Program 2:45-4:30
Adjourn 4:30
Fris further questions from the general meeting can be discussed at the break. The Board thought that this sohedule should allow the largest possible participation in the varied activities we houe scheduled and, hopefully, Eliminate distractions fur ing the main program. To further cut down on noise, etc. the door between the Hardware borkshop and the Meeting Room will be closed at 2 Pl1. After that, entrance to the workshop will be through the hall entrance. we will start to clean up at 4:30. This will preclude the mad scrambles we ve had in the past to get everything out the boack door. Won't the library staff be surprised!

> JACK SHAW MOVES ON

Early CATS member JACK SHAW will be leaving the Washington area just in a few weeks and has a few early Sinclair items he would like to vend to appreciative CATS members (TED OSHEROFF, take note!!).
$3 \mathrm{~T} / \mathrm{S}$ 1000's in original boxes, with manuals.
$2 \mathrm{~T} / \mathrm{S} 1500^{\prime} \mathrm{s}$, one in orignal box, one not.
1 library of popular Sinclair software, circa 1983.
Jack's interest in Sinclair products goes back to the days when he was introducing his children to the wonders of computers, an objective they fulfilled in a most admirable way. He wishes in retrospect

## NOMINATING CONAITTEE IS LOOKING FOR MOLUNTEERS

"What? You say you never volunteer? Volunteers aluays drew hazardous missions behind enemy lines. Egad, sir, nothing like that here!"

It's that time again. You should be thinking about who you want to fill the offices for the next term. But better than just sitting back and thinking; why not get active in the group? Why don't you tell the nominating committee that you'd be willing to serve. Get in touch with one of the people below and tell them that yous will serve.

I think it's fair to warn you that the Newsletter Editor is "APPOINTED" by the Board. If you have a strang opinion about what the newsletter ought to stress or "just want to get your 2 cents in", let the Board know. You can make the difference.

Cogito, ergo sum. I think, therefore 1 am . How that gur Latin/Philosophy lesson is over, it is time to thirik about the direction the GROUP will take during the coming year. KHow's that for transition from the previous article?s The new officers will be looking to the membership for ideas on what should be emphasized during the coming year. "Well," you say, "I" ll just let the Board do it like they"ve always done." This attitude is precisely why groups die out. The graweyard of old user groups is littered with TSUGS that thought that way. CATS has already outlasted most of the groups that were formed in 1982, but we are growing smaller, With smaller numbers; our enthusiasm must be greater, ig we are to insure that we survive. Let's everyone commit themselves to winning the title af "Oldest TSUG in the us".

barcoder and grafix, have made me reconsider my blanket assertion that the British companies associa-

No, your eyes haven't gone bad. The bars at the top of the column spell, "QL on the QT by Vernon Smith" and are a way of announcing a new product on the market, barcode software and a reader from Tony Firshman, 12 Bouverie Place, London W2 1RB, price ` 85 . Like Mt. Everest, I bought it because it was "there" but now I can see some uses for it, besides inventory management, which might not be immediately apparent. Consider archival storage for programs which you develop. If they are stored on disk, there is a possibility that "gremlins" can trash the disk. You must retype the program; however, if they were stored on paper in barcode form, you would just scan the lines with the light pen and the program would be back in magnetic form. As I go along I'm sure I'll find some additional uses, but for now--Yes, I'll admit it--its a fun toy.

If you have Desktop Publishing by Digital Precision and try to use it with a NEC 24 pin printer, you can get a single pass, no more. Well PDQL has the solution for that in the form of grafix which will print the DTP page in any size you want, not just the sizes that come with the program. This ought to be real handy for compressing some of the large DTP page sizes down to $81 / 2^{\prime \prime}$ by $11^{\prime \prime}$. While grafix is a must if you use a 24 pin printer, its ability to rescale a page makes it also a must for those people using DTP with $g$ pin printers, which graFix also supports. If you have a copy of grafix make sure it has the program "grafixc". This is the printer driver written in $C$, and, besides supporting 24 pin machines, has sped the output up. It's still not very fast--a page took 22 minutes to print--but, compared to the original, it is a Ferrari.

My recent experiences with the
ted with the QL were an arrogant churlish lot. My original barcode reader wouldn't work so I called Tony Firshman to see if I could get some schematics so we could troubleshoot the unit. Not only did he respond with the schematics and a copy of the latest version of software (which supports numeric only inputs) but an ENTIRE new chip set! When I told PDQL that the original grafix wouldn't work with my printer, they responded with the c version even though it had only been in their hands for a few days. Now that's two fine examples of SERVICE.

What's new on the hardware scene? Mark Smith, technical guru to the late Quantum Computing, is in the final stages of testing a 68020 based QL with the speed of a Macintosh. Sandy PCP (one of my favorites!) is about to release a hard disk and interface combination which has the features of the SuperQ board (mouse and parallel printer ports, disk IF, and toolkit) with Trump Card memory capacity (nearly 1MB) and SpeedScreen PLUS a port for a 20MB hard disk using, I guess, the SCSI protocol. The whole unit should run around 600 pounds. Most likely the IF will be sold separately which will be a boon for us since hard disks are much cheaper here than in the UK. For the last year or so, the only SCSI I/F on the market was by CST but it turns out that this I/F did not conform to the SCSI pin-out standard. Looks like Sandy is leaving CST eating their dust.

At present I'm waiting on PDQL's new 3-D program "Image D" which John Silk said was still undergoing testing. In the February issue of Quanta Simon Goodwin of Creative CodeWorks talks about their new program, "Quickfax". Sounds very impressive.

## the PLOTTER: Jips and programs for the plotter user

by Pieter van Dijk
This month I did not have enough time to write any programs for the plotter. Instead I made a small program that produces big size letters, as used on labels etc. I was wondering how these letters were produced and spent a few hours writing this program. When I first wrote it, the data statements were too large for my liking so I used a simple compression method to decrease the amount of data.

The program can be used for screen or printer output. It will prompt for a channel number and you must be sure that that channel is opened to screen or printer.

The procedure LOAD_ALFA has only to be run once and loads the letter shapes in the array ALFA\$. Use RUN 110 to skip this procedure.

The procedure PROMPT is used to provide channel number and text (without quote marks) to the program. Only the letters of the alphabet and the digits 0 to 9 are included. Lower case letters are automatically changed to upper case.

The procedure HEADING is the actual character writing procedure and can be called after the data is loaded. The parameters of this procedure are CHANNEL NUMBER and TEXT (with quote marks)

Line 170 limits the length of the string that is printed to 7 characters, to fit on the screen or a 80 character printer. This number can be increased for a wide carriage printer or when condensed characters are used.

The procedures in the program can be used in other programs. Only LOAD_ALFA with data and HEADING $c, t e x t \$$ are required.

Data statement coding:
String slicing is used to limit typing !!

First letter: character that is coded in this line.

The digits that follow are the number of letters or spaces per continuous block in the character involved. A line must start with a block of spaces. If no space block occurs at the start 0 (zero) must be used. The line must end with a character block. If this is not the case, 0 (zero) must be added. Where the length of a block exceeds 9 characters or spaces, for instance 11, 902 is used to limit the number to one digit.

This information should be sufficient to modify or design your own characters.


110 PROMPT
120 HEADING C,TEXT\$
130 DEFine PROCedure PROMPT
140 AT 11, $20:$ INPUT 'CHANNEL ? ' C
150 INPUT TO 20;'TEXT ? ';TEXT\$
160 END DEFine PROMPT
17 DEFI
砣
180 LoCal I, J,K,L,T:CLS
190 L=LEN(TEXT\$):IF L>7:L=7:END IF
200 FOR J=0 TO 6
$210 \mathrm{I}=(84-\mathrm{L}$. 12 ) $/ 2$
220 PRINT\#C,TO I;
230 FOR K=1 TO L
$240 \mathrm{~T}=\mathrm{CODE}(\operatorname{TEXT} \$(\mathrm{~K}))$
250 IF $T\rangle=48$ AND $T<=57$
$T=T-21$
280 IF T$\rangle=97$ AND $\mathrm{T}<=122$
$290 \mathrm{~T}=\mathrm{T}-96$
300 ELSE
$310 \mathrm{~T}=\mathrm{T}-64$
320 END IF
END IF
340 PRINT\#C, ALFA\$(T)(1+(J*9) TO
350 END FOR K
360 PRINT\#C
370 END FOR J
380 PRINT\#C
390 END DEFine HEADING

## EASEL PORTRAITS

## by George Rey

Introduction: Easel is the QL program which permits "painting" graphical presentations of numerical data and printing the results in either one of three graphic modes -- Bar or Line Graphs or Pie Charts. You can input data directly or load the output data fron some other QL progran, such as, Abacus (spreadsheet) via an export-import proceedure given in your manual that allows program interactive transfers from one program to another.

It is important to note that the structure of Easel uses cells which are vertical columas, allowing many Ine (point values) or bar data entries across the horizontal to be made to produce a figure (graph). Each single set of data produces one figure, however you can combine many figures into one or nore composite graphs which have one or all (up to sixteen?)the figures you generated in one, or more, sitting.

Getting Acquainted: After you load Easel you are exposed to a blank $X-Y$ graphic grid above which is the Rain Command Level (HCL) screen to assit you. The screen options available to you are: F1 -- for HELP; F2 -to delete the upper screen prompts; IUMBERS -- indicating you can start entering nunerical data directly; X-Vires indicating that use of the arrow keys will move the cursor crosshair about the screen grid ; TEXT -- $n$ advising the need to insert text using quotation marks; FORMULAR -- indicating data in formular form can be inputed directly; F3 -- COMMARDS (other ones); and ESCape -- which allows you to revert back one step or action previously made.
There are three other commands not shown on the screen or generally indicated, these are : SHIFT + F2 -- DELETS the lawer status window fron the screen; TABULATE -noves cursor one cell to the right; and SHIFT + TABULATE - moves cursor one cell (columi) to the left. The F3 -- COMMAMDS is the most used of the above and makes available more commands.
The F3 Commands: Have, SAVE, LOAD, QUIT, ZAP, and PRIIT comands which are like those of like name in other-QL programs. DEFAULT pernits 40,60 , or 80 colum modes.

KILL deletes whatever figure you wish, and HIGHLIGHT emphasises part of a pie chart or bar graph. OLDDATA allows modifying an existing figure into a new one, and REHANE allows naming or renaming any figure (or graph). FILES allow you to delete, format, backup, ili- or export a file to or from a microdrive. IEYDATA allows you to start a new figure and with EDIT you can alter text, location of the graph key (legend), axis names, and the $X$-axis labels (i.e. change the default months $I$ axis to years, periods, etc. Also, you can delete the default X(horizontal), Y(vertical), Labels, or the Title names of any graph by pressing the F4 key while in Edit command mode. The VIEN conmand allows you to combine two to sixteen (?) like and compatible figures into one master graph. This is good for comparing performances of like stocks, events, actions, cammodities, etc. You may not, be able to, combine pie chart figures with either bar or line figures as only bar and line figures can be combined (?). The last of the fifteen conmands available is the nost important CHALIGE command which has seven sub-commands as follows:

AXIS -- to change the $Y$-axis lindts autonatically, autonatically with a zero base, or manually to your set limits. The latter allows you to amplify the variations of your data on the screen between the maximun and minimun values.

BAR -- Provides sixteen styles of bars or the option to design your own.

LIEE - Provides sixteen styles of lines or the option to design your own.

GRAPHPAPER -- Provide seven styles of paper or the option to design your own.

SEGNEIT - Pie chart color selction.
FORMAT - Provides eight styles, some with bar and line data mixed.

TEXT -- Allows color changes, transparencies, and/or, vertical or horizontal displays.
When you wish to show data that has been line or bar graphed in pie chart form, you can do it one figure at a tiee, but you may not be able to get a composite of multiple graphs to be presented in pie form.
If you have an RGB monitor and your graphs are in the calor form you wish you can have the screen photgraphed with $35-$ min film and make slides for a fine presentation.

Getting Started: Assume we want to compare the yearly costs of two of your major utility expenses over a year's span and have monthly data of the values of each over the 1987 time span. To start, Load the Easel Prograir. This gives you access to the Main Command Level at the top of the screen when the Load is completed. How press F3 (Commands) and then the Rename command. How you can give the figure you are to produce the name you want, such as "heat", and enter. Vith the blank graph grid on screen, select the Edit command and then Axis-name, and then Vertical to insert the $Y$-axis name, such as "Costs", that you want, by erasing (CTRL with left Arrow key) the default name and entering yours. Or, you can delete the default name using the F4 key as previously mentioned, and then enter your new name. Repeat selecting Horizontal to insert the $\mathbb{X}$-axis name, such as "Months", for the monthly periods of time. Finally, repeat again but select Text and mave cursor $\mathbb{Z}$-wire to the Title area, erase, or delete, the word Title and insert, or not, what you want. Iow move back the cursor (Shift + Tabulate to the first cell month, Jan, press ESC to get back to the MCL screen and start inputting your monthly costs. As you enter the first cost the cursor will move to the next cell so that you can enter the subsequent value. As you do the entries a bar colum apears for each entry until you stop. How press F3 and select the Hewdata command and repeat the proceedure above for your second figure, "electric". You now have two sets of data or two graphs.
Mow lets produce a third figure by going back with ESC to the MCL screen and input directly the Formular, total $=$ heat + electric. You will now get a third graph which is the sum of the other two shown. It will have the name "total". Then complete you now have three figures to compare but only the last one on the screen, so press the View command and request to view all the figures by just pressing enter in response to the prompt. All figures now will show on the screen as bar charts and a Key (Legend) also presents itself to identify which bars are which. If the Key is obstructing the bar graph values in any way nove it out of the way by using Edit and Key-position and the arrow keys to locate the Key to where you wish, and press enter when done.

If you don't like the bar, color, style or whatever press the Change command and Bar and select one of the sixteen styles and/or design your own and enter. If you want to have the figures shown as line graphs (ny favorite) press Line in lieu of Bar and likewise select or design what you want and press enter. This will coavert the bar values to Line graphs showing the three costs on the same chart for you to compare them relative to each other. Line graphs allows the line plots to cross each other without obscuring each other. If you want a mixed, bar and line, presentation select the Pormat command and chose anoung the eight styles given one that allows both. If you slect a bar-line style and you have only the data for the three figures, that we have so far, then you will likely get one shown as a line graph and the others as bar charts, whel you view the composite presentation of all three.
If you want to print out anyone, or a composite graph, do so with the Print command. Here you are given a selection of printers to send to, sone of which may be color printers or plotters, to give a pretty picture.
How press the Save comand and flle your work (charts) in an Easel microdrive file or to whatever. Or keep making up more figure as you wish, but beware of your memory capacity, if you have not an expanded memory QL.
Finally, in my opinion, for $\overline{\text { y }}$ prospective uses, Easel is the third most important and usefull program after Quill and Abacus for use on the QL. So don't knock it, use it. Learn to do prograil trading with it and knock the Vall Street gurus far loop.

## harduare hods revied by Phil Russo

"fey, Tom, can you help me over here?
For the longest time I dutifully dismantled my computer setup at home and brought it with me, to our monthly workshop sessions. Each time, I dutifully set my soldering iron, solder, etc. on the table before the other members came in. $I$ was ready to add that new mod to my GL. Fight? Wrong! I didn*t have Enough information on the mod for start and complete it Not to worry, Tom would be in shortly. Fight? Fight! Tom and fifty

# THE CATS 2068 LIBRARY Compiled and 

## anonated by March B. Benick. Jr.

Volume One ---
DATE -- A pseudo-dating service program. Purports to match you up with your ideal mate, but why does it tend to be Attila the Hun? Fun to use at Valentines Day parties.
SAILING -- An interesting little simulation game by our own Mark Fischer.
TRAIN -- Novel use of sound and graphics in this little program. Good train wreck!
KENO -- A computer adaptation, we are told, of an ancient Chinese betting game.
SPACEWAR -- Another Mark Fischer creation. We are invited to blow the opposition to dust with proximity bombs. Not just a shoot-em-up, though.
TAG -- A frustrating game in which we are to get a reluctant colored square to go where we want it. EGG SAVIOR -- Arcade style. Rescue the eggs from nasty lazer guns.
HUNCHY -- Arcade in which you are the Hunchback of Notre Dame. Rescue Esmerelda!
STAR TREK -- The CLASSIC game that everyone used to sneak onto the mainframes at college in the days of yore.
BRICK-YARD BILL -- Arcade-style, help Bill stack bricks without hemming himself in. Quite difficult.
BRIDGE -- Build a bridge by dropping sections from a helicopter before a blind man can fall into the river.
TWISTS -- Restore a $4 \times 4$ Rubic's Cube face to its original configuration before the time runs out. Very challenging.
MINOTAUR -- Find the exit to a maze, collecting invisible objects along the way, before the Minotaur gets you.
DEATHRACE -- Run down innocent pedestrians with your race car. Cute little tombstones mark the

BREAKOUT -- A Basic version of the classic Atari game.
ANGELS -- A space-invaders arcade game.
MOONLANDER -- Land your lander safely on the Moon. I went "SPLAT" every time.
HIDDENWORD -- A word puzzle generator of exceptional quality that was submitted by George Mockridge of the Pacific Users Group.
TIC TAC TOE -- The classic noughts and crosses game with several levels of difficulty.
Q-BERT -- A nicely-done adaptation of the arcade game.
POKER, BLACKJACK, and CRIBBAGE -These three programs pit you against the computer in these popular card games. The graphics are very nicely done.

Volume 2 --- Educational \& Utilities SPANISH TUTOR -- self-explanatory.
GEOGRAPHY -- An unfinished states and capitals program. Someone fill it out, Please!
COLOR PLOT -- A drawing program aimed at children's use.
COLOR DOODLE -- A variation on the above program that makes blockier pictures.
DRAW -- A more sophisticated drawing program.
SPECDRAW -- An even more sophisticated graphics program, featuring 18 sizes of text, fill, four-point banding and more. You really need a keyboard overlay for this one!
PIXFIX -- The winner of the Syncware News contest for graphics software. Gives you pixel by pixel control of the screen.
WOLVERINE -- A sample picture drawn on PixFix.
RANDOM FAN -- Pretty!
PIE CHART -- Makes pie charts from data you supply.
3D SHAPE -- Draws 'em.
BARCHART -- Generates a barchart from yoư data.
HEADLINE and BANNER -- Both of these generate large-size words running side-ways on a 2040 printer.

To be mitinex ned minh

## Let Your Fingers Do the Walking by Mark Fisher

Just a quick report on a valuable resource that has recently opened up in the DC area. The University of Maryland has inaugurated remote access to their on-line system-wide library catalog!

This means that you can browse through the holdings of the UM libraries, both College Park, Baltimore, and Eastern Shore campuses, from the comfort of your own home. And it's free! You'll need a MODEM, of course; 1200 or 300 baud, even pairity, full duplex, 7 data bits, and one or two stop bits!

Libraries represented are:
College Park: (454-5704)
Architecture, Art \& Chemistry Engineering \& Physical Sciences Hornbake (Undergraduate)
McKeldin (Main collections) Music, \& Non-print
Baltimore campus: (455-2346) Kuhn (General collections) Marshall Law
Eastern Shore: (651-2200, ex 661) Douglass (General Collections)

Not all books are in the system yet: only those acquired since 1983 are sure of being in the catalog (though non-College Park libraries are almost $100 \%$ represented). Here's now to do it:

You See
You Type
From College Park area:
Dial 454-6111 <Enter〉<Enter>
Enter class UMCAT <Enter> Class umcat start Begin your search.

From Baltimore County, Catonsville area:

Dial 744-8000
<Enter〉 <Enter>
Enter Class

Class start
<Enter> <Enter> UMCAT <Enter>
Class umcat start Begin your search.
From Baltimore City area:

Dial 328-3921
Enter Class
Class start
Enter class
class umcat start
You can search the files in any way you would normally expect; Author, subject, keyword, or combinations". In addition to the normal bibliographic information you would see in the card file, you can find out the current circulation status of the book in question.

To $\log$ off, they say to type "TCP". It hasn't worked for me -- it only returns you to the main menu (oh well...), but, since they aren't charging, there's nothing wrong with pulling the plug (I guess).

While you cannot change the user prompts, as you get more adept at the system you can chain commands together and avoid the rather tiresome "helpful menus". There is some talk about allowing Boolean searches, but it wasn't implemented when last I checked.

For the future, there are rumors of a "Grand Union Catalog" composed of records from all the major local universities. Now, if we can get THAT piped into our homes!

## 

guys clamoring for information of many sorts. Oh well, I can come back next month.

In the mean time five other ptoviects had been started. Now I'm really confused. (I confuse easily). Did you know there are at least six projects or mods for the QL alone. I believe we have about five for the 2068 and another four for the 1000 . There may be more.

## To be cencluded next nanth

## how I SPENT hy sumier vacation....

A Summer Camp Guide for Kids

## by LeBaron Washington

For those of you who have kids that may be interested in learning something about computers. Here is a listing of summer camps that offer some instruction in computers. This information is offered just as a starting point for anyone that may be interested. No attempt has been made to qualify or evaluate the merits of these camps.

| GAFRIE DAY CAMP |
| :---: |
| 13500 Laytull Re. |
| Silver Spring. Md. 20906 871-6200 |
| Goys bris 3-14) |

BHRGUNY FAROM SLIMER DAY CAMP 3700 Hurgundy Foad Alex mndria. ve 2RGK $960-3431$

CAPF MIHEHAHA
Minnehaha Springs, w, V. 342-9475 (wash. Tel. NC.) $1-806-451-8806$

KAMF KLLMAROCK
8114 Carroll Ave.
Takome Fark, Mo.
427-2524
(515 yrs)

CONGRESIONAL SCHOLL
329 Sleppy Hollow Rd. Falls church, Va, 22044 53-9711

TIC COMFUTER CAMF
(On Campus of Mt. Vernon Coll.) 4620 Ditmar Fd.
Ari.: Va, (0ffice)
241-5542

GRASSHOPPEA GREEN<br>Summer Day Camp<br>4955 Sunset Lane<br>Annandale, Va, 22003<br>256-4711<br>(Boys \& Giris 51/2-12)

## 

400 DEFine PROCedure LOAD_ALFA
410 LOCal COUNT, I,J,K,L:CLS
420 AT 10, 20 :PRINT 'LOADING :'
430 DIM ALFA $\$(36,63)$ :RESTORE 560
440 FOR $I=1$ TO 36
450 COUNT=1: READ A\$
460 FOR $J=2$ TO LEN(A\$)-1 STEP 2
$470 K=A \$(J): L=A \$(J+1)$
480 ALFA\$(I,COUNT TO
COUNT+K) =FILL\$(', K)
490 COUNT $=$ COUNT + K
500 ALFA $(I, C O U N T$ TO
$\operatorname{COUNT}+\mathrm{L})=\mathrm{FILL} \$(A \$(1), L)$


## Jeck Shau-Continued prom Page g

that all the new-fangled dialects of BASIC that came down the pike could have been as powerful and as useful as the original Sinclair Basic we came to know so well. Jack will be at the April 9 CATS meeting, or can be reached at:

1910 Diplomat Court Falls Church, Virginia 22043 703-821-2118

## CLASSTFIED ADS

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## WHICHEVER THE BEST EVER

Recently Vernon Smith tried hard to get a contest started regarding best pro－ gram of 1987 with scant response．So let＇s just issue a challenge；instead of writing in a title name，contend and defend！

The BEST program ever written for either the spectrum or the TS2068 is ＂Bridge Player 2 ＂by CP Software，an Eng－ lish firm，for the 48 K spectrum．That＇s it．NOT the best game ever，the best pro－ gram．

A game？Yeah．For all those applica－ tions programs，you can hire someone to do work，but a bridge partner that won＇t quar－ rel？Why in the world would I trivialize the dignity of hoary＂Hot Z＂or prolific
＂Profile＂or diminish the glamour of＂The Worx＂？Because this＂Bridge Player 2 ＂most nearly meets tne classic definition of artificial intelligence－－that one should not realize one＇s collaborator or opponent is not another humann being！

More number－crunching talent than most of my friends，but not infallible．The computer can go set．A human with masters＇ points can anticipate the probable lay of the cards as well as the computer．A skil－ led bridge player can recall who held what as well as the computer，but the lil human－ oid will grab the faintest encouragement to run you up to 6 No Trump just like a human． It understands Blackwood and Stayman Con－ ventions and gets overzealous just like people．

This game can be set to give you the best hands each deal；after winning 3 rub－ bers in a row，I remembered what teachers have always known．Cheaters always win， but they don＇t learn much．So reset the prog to randomly assign deals．You can chose to go through the bidding process or not；see everyone else＇s hand or not；throw in the hand or replay it，review the bidding，what＇s been played．After all the options have been tried，most valuable is the simulation of real bridge for grand company without the calories of nervous nibbling or distraction of table gossip． And no last minute finding a fourth because someone cancelled．

So if you are convinced I am wrong， let＇s hear from you．What＇s the best pro－ gram ever for which computer and WHY？

Joan Kealy

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